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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,192	11/18/2003	Daniel Charles Heinz		3344

7590 12/06/2006  
Steven Scott Lloyd  
238 South Wolfe Street  
Baltimore, MD 21231

EXAMINER

TORRES, ALICIA M

ART UNIT PAPER NUMBER

3671

DATE MAILED: 12/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/715,192

Applicant(s)

HEINZ ET AL.

Examiner

Alicia M. Torres

Art Unit

3671

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 13 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 18-25, 27, 28, 33-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beranek et al. 2,478,558 in view of Shurman et al. 5,007,234.

Beranek et al. discloses a cutting apparatus comprising:

- A replaceable blade (23) perpendicularly fixed to the end of a drive shaft (22) connected to a replaceable power means (16), the shaft (22) at a fixed angle (when leaning resting on runner 27) tilted longitudinally between 1 and 90 degrees from vertical, the angle being adjustable (by tilting the chassis around the wheel axles, at 8)
- A grass guide (35) that bends to constrain grass to be cut by the blade (23, by enclosing the grass inside the guide, the guide constrains the grass)
- A chassis (4, 15)
- Means for effecting movement of the apparatus comprising:
  - A handle (5)
  - Wheels
- Wherein the power means comprises:
  - A single electric motor (16)

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- Wherein the height of the cutting blade (23) is adjustable (by tilting the chassis around the wheel axles, at 8).

However, Beranek et al. fails to disclose:

- A plurality of blades projecting downward from a power means
- The power means comprising:
  - A plurality of small electric motors powered by a battery, or
  - An internal combustion engine.

Shurman et al. discloses a similar self-guiding cutting device including:

- A plurality of blades (12a-12d) projecting downward from a power means (10a-10c)
- The power means comprising:
  - A plurality of small electric motors (10a-10c) powered by a battery (16), or
  - An internal combustion engine (col. 4, lines 49, 50).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the power sources of Shurman et al. on the cutting apparatus of Beranek et al. in order to provide energy efficiency.

3. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shurman et al. and Beranek et al. as applied to claim 18 above, and further in view of Goman et al. 6,622,464.

The device is disclosed as applied above. However, the combination fails to disclose the power source comprising an internal combustion engine and an electric motor.

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Goman et al. discloses a lawn mower having a power source (6) comprising an internal combustion engine and an electric motor (col. 8, lines 18-20).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the power source of Goman et al. on the cutting apparatus of Beranek et al. and Shurman et al. in order to provide power to the cutting blade.

4. Claims 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beranek et al. and Shurman et al. as applied to claims 23 and 24 above, and further in view of Paytas 4,987,729.

The device is disclosed as applied above. However, the combination fails to disclose wherein the power source comprises a battery and a solar cell.

Paytas discloses a mower having a power source comprising batteries (22, 24) and a solar cell (30).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the power source of Paytas on the cutting apparatus of Beranek et al. and Shurman et al. in order to reduce emissions.

5. Claims 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Beranek et al. and Shurman et al. as applied to claims 23 and 24 above, and further in view of Fillman et al. 6,571,542.

The device is disclosed as applied above. However, the combination fails to disclose wherein the motor is powered by a fuel cell.

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Fillman et al. discloses a lawn mower with a motor powered by a fuel cell (24).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the fuel cell of Fillman et al. on the cutting apparatus of Beranek et al. and Shurman et al. in order to provide a long lasting power source.

### ***Response to Arguments***

6. In response to the applicant's argument that Beranek et al.'s guide (35) does not read on the claims, the applicant is arguing more than claimed. There are no structural details specific enough to preclude the Beranek et al. reference. The claims require only a grass guide that bends to constrain grass to be cut. Beranek's guide is bent and reaches low enough to the blade to inherently gather grass inside the guide and near the blade. Grass will get trapped inside the guide and therefore be constrained for cutting. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In this case then, it is irrelevant that Beranek fails to specifically teach the constraining of grass to be cut, since the structure of the guide is such that grass will be constrained.

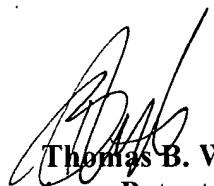
### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia M. Torres whose telephone number is 571-272-6997. The examiner can normally be reached Monday through Thursday from 7:00 a.m. – 4:30 p.m.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas B. Will, can be reached at 571-272-6998.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the group receptionist whose telephone number is 571-272-3600. The fax number for this Group is 571-273-8300.



**Thomas B. Will**  
**Supervisory Patent Examiner**  
**Group Art Unit 3671**

AMT  
November 29, 2006